

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (CURRENTLY AMENDED) A switching device that selectively switches connections to a selected terminal among a plurality of terminals connected to computers, and can be remote-controlled over a network, comprising:

- a network interface circuit to be connected to the network;
- an image processing unit that includes an image compression circuit for compressing image signals outputted from the computers;
- a controller that changes a compression method or compression rate to be used at the image compression circuit, in accordance with a congestion level of the network; and
- a circuit ~~causes that bypasses~~ keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression circuit, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression circuit.

2. (ORIGINAL) The switching device as claimed in claim 1, further comprising a packet filtering circuit that adds up a packet data amount received through the network interface circuit.

3. (ORIGINAL) The switching device as claimed in claim 1, comprising a plurality of image processing units and a plurality of remote-control computers that can be connected to the network, the number of the image processing units being the same as the number of the remote-control computers.

4. (ORIGINAL) The switching device as claimed in claim 1, wherein the controller reports the changed compression method or compression rate to a remote-control computer.

5. (WITHDRAWN) A switching device that selectively switches connections to a predetermined terminal among a plurality of terminals connected to computers, and can be remote-controlled over a network,
the switching device comprising
a controller that makes the computers recognize a mouse, connected to a remote-control computer over the network, as an absolute value device.

6. (WITHDRAWN) The switching device as claimed in claim 5, wherein the controller is a USB controller.

7. (WITHDRAWN) A switching device that selectively switches connections to a predetermined terminal among a plurality of terminals connected to computers, and can be remote-controlled over a network,
the switching device comprising:
a function that receives mouse coordinates of a mouse connected to a remote-control computer over the network;
a function that calculates the difference between the received mouse coordinates and previously received mouse coordinates; and
a function that transmits relative value data to a corresponding one of the computers.

8. (CURRENTLY AMENDED) A computer system comprising:
a switching device that selectively switches connections to a selected terminal among a plurality of terminals, and can be remote-controlled over a network, the switching device including: a network interface circuit to be connected to the network; an image processing unit that includes an image compression circuit for compressing image signals; and a controller that changes a compression method or compression rate to be used at the image compression circuit, in accordance with a congestion level of the network; and
a circuit that ~~causes~~bypasses keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression circuit, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression circuit;
a plurality of computers that are connected to the switching device; and
a remote-control computer that is connected to the switching device via the network.

9. (CURRENTLY AMENDED) A method of updating an image compression method or compression rate to be used in a switching device that selectively switches connections to a selected terminal among a plurality of terminals connected to computers and can be remote-controlled over a network, comprising:

calculating a congestion level of the network; and

changing the image compression method or compression rate to be used in the switching device, in accordance with the calculated congestion level of the network, and ~~causing bypassing~~ keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression.

10. (PREVIOUSLY PRESENTED) The method as claimed in claim 9, wherein the calculating further calculates data flow per unit time from an operation period of a packet filtering function and the amount of data transmitted from a packet filtering circuit.

11. (PREVIOUSLY PRESENTED) The method as claimed in claim 9, further comprising reporting the changed image compression method or compression rate to a remote-control computer.

12. (CURRENTLY AMENDED) A method of updating an image compression method or compression rate to be used in a switching device that selectively switches connections to a selected terminal among a plurality of terminals connected to computers and can be remote-controlled over a network, comprising:

calculating a congestion level of the network, the calculation being performed by a remote-control computer connected to the network;

determining the image compression method or compression rate to be used in the switching device, in accordance with the calculated congestion level of the network, and ~~causing bypassing~~ keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression; and

reporting the determined image compression method or compression rate to the switching device.

13. (CURRENTLY AMENDED) A method of updating an image compression method or compression rate to be used in a switching device that selectively switches connections to a selected terminal among a plurality of terminals connected to computers and can be remote-controlled over a network, comprising;

calculating a congestion level of the network, the calculation being performed by a remote-control computer connected to the switching device via the network, and ~~causing bypassing~~ keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression; and reporting the calculated congestion level of the network to the switching device.

14. (PREVIOUSLY PRESENTED) The method as claimed in claim 12, wherein the calculating further calculates data flow per unit time from a measuring period and the amount of packet data received within the measuring period.

15. (CURRENTLY AMENDED) A method of determining an image compression method or compression rate to be used in a switching device that selectively switches connections to a selected terminal among a plurality of terminals connected to computers and can be remote-controlled over a network, comprising:

receiving a congestion level of the network from a remote-control computer connected to the network; and

changing the image compression method or compression rate to be used in the switching device, in accordance with the received congestion level of the network, and ~~causing bypassing~~ keyboard signals and mouse signals[, \] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression.

16. (CURRENTLY AMENDED) A method of updating an image compression method or compression rate to be used in a switching device that selectively switches connections to a selected terminal among a plurality of terminals connected to computers and can be remote-controlled over a network, comprising:

calculating a transmission period between the switching device and a remote-control computer that is connected to the switching device via the network; and

changing the image compression method or compression rate to be used in the switching device, in accordance with the calculated transmission period, and ~~causing~~bypassing keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression.

17. (CURRENTLY AMENDED) A method of updating an image compression method or compression rate to be used in a switching device that selectively switches connections to a selected terminal among a plurality of terminals connected to computers and can be remote-controlled over a network, comprising:

calculating a congestion level of the network, the calculation being performed by the switching device;

calculating a congestion level of the network, the calculation being performed by a remote-control computer connected to the switching device via the network; and

changing the image compression method or compression rate to be used in the switching device, in accordance with the congestion levels of the network calculated in the foregoing steps, and ~~causing~~bypassing keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression.

18. (WITHDRAWN) A method of converting mouse coordinates that are to be used in a remote-control computer connected to a switching device via a network, the switching device selectively switching connections to a predetermined terminal among a plurality of terminals connected to computers,

the method comprising the steps of:

acquiring an operation screen size displayed on the remote-control computer;

inquiring of the switching device the screen size of one of the computers, and receiving the screen size of the computer from the switching device;

calculating coordinate scales from the operation screen size and a computer screen resolution calculated from the screen size of the computer; and

converting the mouse coordinates into computer absolute coordinates, based on the calculated coordinate scales.

19. (CURRENTLY AMENDED) A computer readable storage program product for controlling a computer and encoded with a computer program for causing a computer to update an image compression method or compression rate to be used in a switching device, comprising:

instructions for calculating a congestion level of a network between the switching device and a remote-control computer; and

instructions for changing the image compression method or compression rate to be used in the switching device, in accordance with the calculated congestion level of the network, and for ~~causing~~bypassing keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression.

20. (CURRENTLY AMENDED) A computer readable storage program product for controlling a computer and encoded with a computer program for causing a computer to update an image compression method or compression rate to be used in a switching device, comprising:

instructions for calculating a congestion level of a network between the switching device and a remote-control computer that is connected to the switching device via the network;

instructions for determining the image compression method or compression rate to be used in the switching device, in accordance with the calculated congestion level of the network, and for ~~causing~~bypassing keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression; and

instructions for reporting the determined image compression method or compression rate to the switching device.

21. (WITHDRAWN) A program product for causing a computer to convert mouse coordinates, comprising:

instructions for acquiring an operation screen size displayed on a remote-control computer;

instructions for inquiring of a switching device the screen size of a computer, and receiving the screen size of the computer from the switching device;

instructions for calculating coordinate scales from the operation screen size and a computer screen resolution calculated from the screen size of the computer;

instructions for converting the mouse coordinates into computer absolute coordinates, based on the calculated coordinate scales; and

instructions for transmitting the computer absolute coordinates to the switching device.

22. (CURRENTLY AMENDED) A computer-readable medium encoded with a program for causing a computer to update an image compression method or compression rate to be used in a switching device, the program when executed by a computer causes the computer to perform the method, comprising:

calculating a congestion level of a network between the switching device and a remote-control computer; and

changing the image compression method or compression rate to be used in the switching device, in accordance with the calculated congestion level of the network, and ~~causing~~bypassing keyboard signals and mouse signals[,] supplied via the network to said selected terminal to bypass the image compression, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression.